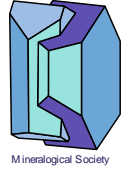




The Geological Society

VMSG



Volcanic and Magmatic Studies Group

February '13 Newsletter (No. 22)

Happy New Year!

Welcome to another edition of the VMSG newsletter, we wish you had an enjoyable holiday period and a happy New Year. In this edition we report on the highly successful annual meeting, held this year in Bristol. There is also news of changes to the committee and also forthcoming events to be run through the special interest group and some reports from students who have benefited from bursaries this last year.

VMSG Bristol 2013 - Annual meeting report



The annual VMSG meeting took place from 7th-9th January 2013, hosted by the University of Bristol. It was one of the largest meetings to date, with 233 registered delegates from the UK and beyond. Of these over 51% were students contributing significantly with 66% of the oral and 63% of the poster presentations being presented by PhD, Master and undergraduate students.

The exciting science program was spread over three days including diverse topics such as magma, storage and degassing, physical volcanology, geophysical and geodetic monitoring techniques to the complexity of risk and decision making policies of volcano alert levels and entablature. The meeting kicked off with a keynote presentation by Kathy Cashman: "Changing the metaphor – from magma chamber to magma reservoir", with an interesting discussion on the definition of these terms. Our second keynote, Yoshihiko Tamura from JAMSTEC, Japan followed on Tuesday morning, giving a very stimulating presentation on the Mariana arc. The main part of Tuesday was reserved for poster presentations, allowing for ample opportunity for networking and discussions. Although this poster format was new to VMSG this year, initial feedback

suggests many delegates enjoyed the ability to peruse the posters over an extended time period. The meeting closed on Wednesday with the conclusion of oral presentations and a special session in honour of John Guest and his work on planetary volcanism.

It was noted by the committee that the level of student presentations was again very high. The *Bob Hunter prize for best student talk* was awarded to **Holly Elliott** (Southampton) for her presentation on "*Diatreme volcanism facilitating Pb-Zn mineralisation in the Irish Orefield*". The *Geoff Brown prize for best student poster* was jointly awarded to **John Browning** (Lancaster) for "*Vesiculation of a rhyolitic melt: new insights from hot-stage microscopy experiments*" and **Andrew Thompson** (Bristol) for "*Recognising mush disaggregation in basaltic systems: the distribution of olivine compositions in Icelandic basalts and picrites*".

Other highlights included the conference dinner, held at The Grand Hotel in Bristol city centre: an excellent opportunity for delegates to network over a wonderful dinner with an energetic ceilidh to round the evening off; and a well-attended public lecture (50 public and 28 from VMSG) hosted by '@Bristol' on the Tuesday evening by Ellen Stofan on the "*Mapping of volcanic terrains across the solar system*". John Guest's widow attended and was extremely grateful that there was a public event linked to her late husband's contributions.

VMSG 2013 also saw the introduction of the VMSG calendar competition. People within the VMSG community submitted over 20 photos. These were anonymously judged by a panel of active researchers from within the community, short listing the final 12 that were printed in the calendar. The meeting delegates conducted final judging for 1st, 2nd and 3rd prizes. First prize for his image of Katmai caldera was awarded to **Richard Wall** (UCL), 2nd prize jointly awarded to **Börje Dahren** and **Fiona Meade** (Uppsala University) for their image from the Faroe Islands and 3rd prize for her image of a lava tube to **Sandra Karl** (University of Leeds). First and second prize winners received either a brandy or wine glass made by Bristol Blue glass and third prize enjoyed a very nice bottle of Santorini wine.

During the meeting, impressively delegates managed to eat two local pubs dry and made a good attempt of drinking them

dry, with reports of several on-tap beers running out on both Tuesday and Wednesday nights! The Bristol organising committee would like to extend a warm thanks to all our meeting supporters, presenters and delegates who made the meeting such a success. We look forward to seeing you all in Edinburgh for the 50th VMSG meeting.

VMSG Award Winner 2013: Dr Mike Branney

The VMSG award, given out each year to a member of the volcanic and magmatic community who has made an outstanding contribution to science and VMSG was, this year, awarded to Dr Mike Branney (University of Leicester) for his contributions to furthering our understanding of hazardous volcanic ash flows. During the meeting Mike gave a thoroughly enjoyable talk on the “behaviour of giant pyroclastic density currents: deductions from deposits”



Dr Mike Branney (right) receiving the VMSG award from Prof. Andy Saunders (VMSG Chair).

New Committee Members

Many thanks must be made to Charlotte Vye-Brown, Rob Ellam and Tim Watton, the three outgoing members of the VMSG committee who over their tenure have helped to grow the group to new strengths. Towards the end of last year two new ordinary members were elected to the committee - these being Sue Loughlin of the British Geological Survey (BGS) in Edinburgh and Lorraine Field of the BGS in Keyworth. The new student representative is Peter Marshall, a 2nd year PhD student at the Open University.

Sue Loughlin (BGS, Edinburgh)

I've been Head of Volcanology at the British Geological Survey since 2008 based in Edinburgh. I did my PhD at Durham University on the geochemistry and physical volcanology of the Eyjafjallajökull volcano, Iceland. I started at BGS in 1995 and worked at Montserrat Volcano Observatory, from 1997 as Deputy Chief Scientist and between 2004-6 as Director, managing the monitoring, science and communication with the public and decision-makers. I'm engaged in both operational responses to volcanic eruptions, as well as research and science into policy. My research interests include volcanic hazards and risk, lava dome morphology and stability, pyroclastic density currents, petrology and geochemistry. I have specific interest in the effective communication of science, volcanic hazards and risk, and remote sensing services for volcano observatories. Having attended VMSG meetings since I was student I'm very happy to have this opportunity to contribute to the continued success of VMSG.



Lorraine Field (BGS, Keyworth)

I'm currently working as a mineralogist and petrologist at the British Geological Survey. I'm interested on anything on the micro-scale, and current work is very diverse, but I'm particularly interested on what crystals can tell us about magmatic systems. I completed my PhD at Bristol last year having returned to University as a mature student. My thesis was on the magmatic systems of two volcanoes in the Afar region of Ethiopia. Many thanks to everyone for giving me the opportunity to be involved in VMSG; I'm looking forward to being involved in the committee!



Peter Marshall (The Open University)

I'm currently a 2nd year PhD student at the OU. My research is focused on the Kalkarindji flood basalt province in Australia and trying to build up a volcanic architecture through a variety of analytical techniques including ⁴⁰Ar/³⁹Ar dating, palaeomagnetism and field volcanology. I'm looking to increase the student activity within the group this year with several initiatives including an online forum.



VMSG Fieldtrips - 2013

We are hoping to have three field trips available for all VMSG members this year. The trips will all follow a 3-4 day "long weekend" format, and will be run with budget accommodation and transport options to make them as accessible to all. All places are reserved on a first come first served basis. Please inform us of any special requirements when you make your provisional booking, and we will do all we can to accommodate your specific needs.

We are planning to run field trips to **Mull** (mafic & silicic intrusions, ignimbrites, ring dykes, peperites) and **Skye** (intrusion mechanisms, sill emplacement, and impact on sedimentary basins) later in the year (details to follow), but first up this year we have:

A Geological Tour of Jersey (19-21 April 2013)

Trip leader: Nick Petford.

Cost: approx £175 (students) £225 (non-students) per person (max ~12-14 people). Final prices are still to be confirmed - and include ferry, transport and two night B&B accommodation in Jersey. Accommodation on the night of the 18th April can also be arranged for an additional £40pp. More details are available on the Facebook group and website. To provisionally book a place on this please contact:

vanessa.sulch@northampton.ac.uk

Student Reports

2012 saw an unprecedented number of students being awarded bursaries for aid with attendance at conferences to present their research to the wider volcanic community. All reports can be found on the website.

Leanne Gunn (The Open University)

I attended the MIA-VITA (Mitigate and Assess risk from Volcanic Impact on Terrain and human Activities) International Scientific Conference on Integrated Approaches for Volcanic Risk Management on the 11-12 September 2012 at Hohenheim

University, Stuttgart, Germany. The MIA-VITA project is interested in research focussing on risk assessment methodologies, cost efficient monitoring tools, vulnerability assessment, socio-economic surveys and integrated information systems and the conference was designed with these topics in mind. It was really interesting to see how much research is being conducted in these fields and how successful the project is at combining approaches and conveying results to other research groups on an international scale.

I really enjoyed the conference and the networking opportunities it presented. I gave an oral presentation entitled 'The Duration of Icelandic Volcanic Eruptions: Controls and Forecasts' on the final day of the conference giving me the opportunity to



introduce preliminary results of a new probabilistic model that can be used to forecast future volcanic eruption durations. The work is ideal for the conference as the implications of the research would greatly benefit risk management and decision making before and during times of volcanic crisis. The talk received much interest and many positive comments and suggestions that I can now implement into future development of the model during the final year of my PhD. This was also my first conference talk and I am really grateful for the experience that it has given me. This will certainly make future conference talks far easier to prepare for and has increased my confidence at oral presentations.

I would like to thank VMSG for the funding that I received which enabled me to attend such an interesting and useful conference.

Penelope Small (Kingston University, London)

The VMSG kindly provided me with £300 to help me attend the AGU Fall Meeting held in San Francisco, California in early December 2012. At the conference I presented a poster entitled "Digital mapping and analysis of accommodating structures and deformation associated with the emplacement of high level magmatic intrusions, Henry Mountains, Utah". This conference and the session on "Geologic Maps as a Basis for Integrated Studies in Volcanology and Tectonics" provided me with my first opportunity to present my work to an American, as well as an international, audience. The theme of the poster-only session benefited me greatly as I was able to showcase my newly collected terrestrial laser scan data of my field area,

whilst presenting both the science and methodologies behind my PhD research. I received great feedback from several delegates who stopped to look at my poster and entered into some excellent discussions with a few.



AGU was an excellent experience. I learnt much while there, attending both sessions directly related to- and ones more peripheral to- my research (largely sponsored by the Tectonophysics and Volcanology, Geochemistry, and Petrology divisions). I was very impressed by the set-up, in particular the enormous poster hall, which allowed for networking

amongst geoscientists with a great diversity of specialties. A great believer in interdisciplinary research, my poster was attended by a varied audience, leading to thinking outside of the box.

In my own session, I learnt about alternative digital methodologies and field mapping and 3D modelling software packages from other delegates, some of which I may trial in future fieldwork. In addition to the presentation to my name, I take much more with me from the conference, including new contacts from all over the world in similar research fields (I have since had emails from some with papers of mutual interest), and new friends within my peer group.

Student Bursaries 2013

VMSG offers a bursary up to £300 for aid with attendance at conferences and/or workshops. The deadline for the next round of applications is **1st June 2013**. Certain requirements must be fulfilled to be eligible and you may only apply once during your studentship, see the website for further details.

Notices

Upcoming conferences of relevance to the VMSG community:

- Geochemistry Group Research in Progress Annual Meeting (The Open University, Milton Keynes: March 14th 2013)

➤ https://www.geolsoc.org.uk/en/Events/Research%20in%20Progress%20Meeting.aspx?ec_trk=followlist&ec_trk_data=Events

- Volcanism, Impacts and Mass Extinctions: Causes and Effects (Natural History Museum, London: March 27-29th 2013)
➤ massextinction.princeton.edu
- IAVCEI 2013: Forecasting Volcanic Activity (Kagoshima, Japan: July 20-24th 2013)
➤ www.iavcei2013.com
- Metamorphic Studies Group: Building Strong Continents (University of Portsmouth: September 2-4th 2013)
➤ www.port.ac.uk/special/buildingstrongcontinents

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Go to the group homepage at www.jiscmail.ac.uk/vmsg and choose the 'Subscribe or Unsubscribe' link from that page. You will receive a confirmation email which you will need to respond to.

For up to date news in the VMSG community, please join the Facebook group. Simply search for 'VMSG' for the latest updates regarding the group.

Editorial

Please forward any articles, comments or notices of events, workshops and conferences before 1st May 2013, for inclusion in the next newsletter.

All previous newsletters are available for download from the website.

Peter Marshall (peter.marshall@open.ac.uk)